

NASA TECH BRIEF



NASA Tech Briefs are issued to summarize specific innovations derived from the U.S. space program, to encourage their commercial application. Copies are available to the public at 15 cents each from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151.

Study Made of Destructive Sectioning of Complex Structures for Examination

The problem:

Destructive sectioning is a common examination technique and is used in reliability and quality control determinations. However, very small or complex structures often cannot readily be sectioned while maintaining spatial integrity of the component parts.

The solution:

Fill the structure in a vacuum with a low viscosity (approx. 1500 centipoises) potting compound.

How it's done:

After the potting compound has hardened, the structure can be cut in any plane without danger of spatial disorientation. Visibility of the cut surface can be increased by polishing techniques.

Notes:

1. This potting and sectioning technique has been applied to a very small ion engine with excellent results.
2. Inquiries concerning this innovation may be directed to:

Technology Utilization Officer
Lewis Research Center
21000 Brookpark Road
Cleveland, Ohio 44135
Reference: B66-10676

Patent status:

No patent action is contemplated by NASA.

Source: T. Riley
(Lewis-341)

Category 05